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SEQ ID NO:18 -----  
 SEQ ID NO:22 TKTSAAPFLFTLSLRSNMTTEERNVRKTRV-----  
 SEQ ID NO:20 MGGEAP-----  
 SEQ ID NO:37 M-----  
 SEQ ID NO:22 EARRLDRAAMSFGGAGSIPPEEALHVLGVYDPRDREAVSLVC  
 SEQ ID NO:37 M-----EDPDJIKRCKL-----SCVATVDDVIEQQVMTYIIDPKDRDSASLVC  
 1

-----  
 SEQ ID NO: 18 RRYEYELDSITRKHVTIALCYTTPARLRRRFPHLESI  
 SEQ ID NO: 22 RRWYELDSITRKHVTIALCYTTPARLRRRFPHLESI  
 SEQ ID NO: 20 RRWYELDSITRKHVTIALCYTTPARLRRRFPHLESI  
 SEQ ID NO: 37 RRWYELDSITRKHVTIALCYTTPARLRRRFPHLESI  
 -----  
 TRPRT  
 RRAAMENLIPEDWGHHVT  
 RRAAMGLIPEDWGAYAR  
 RRAAMNLIPENWGGYVT  
 -----  
 61

SEQ ID NO: 18	PWVKEISQYFEDCLKSLHFRRMIVKDSLQLQNLARDRGHVLHALKLKDCKSGFTTDGLFHIGR
SEQ ID NO: 22	PWVAELAAPPLECLKALHLRRMIVVTDLAAALVRARGHMLQELKLKDCKSGESTDALRLVAR
SEQ ID NO: 20	PWVTEISNNLRQLKSVHFRRMIVSDDLDRLLAKARADDLETLKLDCKSGFTTDGLLSIVT
SEQ ID NO: 37	121
	180

SEQ	ID NO: 18	-RGLETLFLLEESTIDEKENDIRELATNSVLETLNFEFTL-RASPEYLTLLVRNCQ
SEQ	ID NO: 22	FCKSLRVLFLEESSILEKD-GEWLHELAIIKNCP
SEQ	ID NO: 20	SCRSLRTFLFEECSIAIDNGT-EWLMHDLAVNPNVLETINFHMTL-TVVPADLLEIALLAKCK
SEQ	ID NO: 37	HCRKIKTLMEESSFSEKD-GKWLHELAQHNTSLEVNFYMTFAKISPKDLETIARNCR

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SEQ	ID NO: 18	YLWVQGERSSPTGTIDIMAMVRPEWWNIEYIVP-----DQDEPCPEHKRQIILAYYSLA
SEQ	ID NO: 22	YLWVQGYGVSPSGRDLVMMARPEWWNIELI-PSRKVATNTNPDETUVVVEHPAHILAYYSLA
SEQ	ID NO: 20	YVWVQGYKASKTGHDIMLMARPEWWNIEFTPPSSENAANRMREDGEPCVDSDQAQIILAYYSLA
SEQ	ID NO: 37	YLWVQGYRASMTGQDLMQMARPYWWNIELI-PSRRVPEVNQQGEIREMEEHPAHILAYYSLA

	*	*	*	*	*	*
SEQ	ID NO: 18	GRRTDCPPSVTLLY				
SEQ	ID NO: 22	GQRSDEPDVVPLD				
SEQ	ID NO: 20	GKRSDCPRSVVPLY				
SEQ	ID NO: 37	GQRTDCPTTVRVLK				

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SEQ ID NO: 30	MPVMAPTASL---LLSPRPLPASRRVPSSPA-----	LSASGRRLRIRRARRADTRLRVA
SEQ ID NO: 32	MALPHSISALATTTLTSSPITKPHKVNPFPFSSNRNSQFLTKOTPRRSRRNLSLTPARVA	
SEQ ID NO: 36	-----	-----LRVA
SEQ ID NO: 38	MATIPALSL---LVTPR-----LPSLAV-----	PLAGGRLR-EGGRSRTRRLRVA
	1	60
*****		
SEQ ID NO: 30	APPSPVPGEAD--QAPGETEPSTSSAD--EKFVWRDHWYPPVSLVLEDLDPSPVPTEFQLLN	
SEQ ID NO: 32	APPSTVEADRLLYPEAENNETEEFSDESSSKFTWRDHWYPPVSLIEDLNPLLPTPFQLLGR	
SEQ ID NO: 36	APTSVPGEAE--RAEEPSTSTSPESSEKEFVWRDHWYPPVSLVEDLDPRVPTEFQLLN	
SEQ ID NO: 38	APTSVPGEAA--EQAEPSTSAPES---GEKFSWRDHWYPPVSLVEDLDPSRPTPFQLLN	
	61	120
*****		
SEQ ID NO: 30	DLVIWKDPKSGEWAVALDDRCPHRLAPLSEGRIDETGCLQCSYHGWSFDGSGACTRIPQAA	
SEQ ID NO: 32	EIVLWYDKSISQWVAFDDKCPHRLAPLSEGRIDEKGKLQCSYHGWSFDGCGSCVKIIPQAS	
SEQ ID NO: 36	DLVIWDPNSGDWVALDDRCPHRLAPLSEGRIDETGGLQCSYHGWSFDGSGACTRIPQAA	
SEQ ID NO: 38	DLVIWKEPKSGEWAVALDDRCPHRLAPLSEGRIDETGCLQCSYHGWSFDGSGACTKIPQAM	
	121	180
*****		
SEQ ID NO: 30	PEGPEAKAVRSRKACAIKEPTLVSQGLLFVWPDENGWEEKATATKPPMILPREFEDPAFSTV	
SEQ ID NO: 32	SEGPEEARIGSPKACATREPTLVSQGLLFVWPDENGWEEKAKASNPMPFDDDFKPEFPTV	
SEQ ID NO: 36	PEGPEEARVSPRACATKEPTLVSQGLLFVWPDENGWEEKWDKAATKPPMILPKEFDDPAFSTV	
SEQ ID NO: 38	PEGPEEARVRSRKACAIKEPTLVSQGLLFVWPDENGWEEKAAATKPPMILPKEFDDPAFSTV	
	181	240

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\*\*\*\*\* TIQORDLYGYDTLMENVSDPSHIEFAXHKVTGRDRARPLPEFKMESSGAWGYSGSNSGNP  
 SEQ ID NO: 30  
 SEQ ID NO: 32 NIQORDLFYGYDTLMENVSDPSHIEFAHHKVTGRDRAKPLPEFKMDSRGSWGFSGANEGNP  
 SEQ ID NO: 36 TIQORDLFYGYDTLMENVSDPSHIEFAHHKVTGRDRAKPLPEFKMESSGAWGYSGANTGNP  
 SEQ ID NO: 38 TIQORDLFYGYDTLMENVSDPSHIEFAHHKVTGRDRARPLTFRMMESSGAWGYSGANSGNP  
 300  
 241

\* \* \* RISATEFAPCYALNKEIDTKLPIFGDOKWVIWICSFNIPMAPGKTRSIVCSARNFEQFS  
 SEQ ID NO: 30  
 SEQ ID NO: 32 QISAKFVAPCYMMNKIEIDTKLPVVGDOQKWWVVWICSFNVPMAPGKTRSIVCSARNFEQFS  
 SEQ ID NO: 36 RITATFEAPCYALNKEIDTKLPIVGDOKWVIWICSFNIPMAPGKTRSIVCSARNFEQFT  
 SEQ ID NO: 38 RITATFEAPCYALNKEIDTKLPIFGDOKWVIWICSFNIPMAPGKTRSIVCSARNFEQFT  
 360  
 301

\* \* \* \* \* VPRWYEHWTSNLVYDGDMLVLQGQEKFILSAS  
 SEQ ID NO: 30 MPGKAWWQL-----  
 SEQ ID NO: 32 VPGPAWWQVNVILLEAFNEFKQCIIHVTQVVPRWYEHWTSNKVYDGDMLVLQGQEKFILSET  
 SEQ ID NO: 36 MPGKAWWQF-----  
 SEQ ID NO: 38 MPGKAWWQL-----  
 420  
 361

\* \* \* \* \* VPRWYEHWTSNLVYDGDMLVLQGQEKFILAAT  
 SEQ ID NO: 30 KESSADINQQYTKITTEPTQADRFVLAFAWLRKFGNSQPDWFGNPSQEVLPLSTVLSKRE  
 SEQ ID NO: 32 KEGG-DINKQYTNITFTPTQADRFVLAFARNWLRRHGNQPEWFGNSSDQPLPLSTVLSKRE  
 SEQ ID NO: 36 KESSADVNNQQYTKLTETPTQADRFVLAFAWLRKFGNSQPDWYGSPSQDALPSTVLSKRE  
 SEQ ID NO: 38 KESSTDINQQYTKITTEPTQADRFVLAFCRTWLRFGNSQPEWFGNPTEALPSTVLSKRE  
 480  
 421

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\*\*\*\*\* \* \* \* \* \* MLDRYEQHTLKCSSCKGAYNAFQTLQKVEMGATVA-----VLLLL-----  
 SEQ ID NO: 30 MLDRYEQHTLKCSSCKGAYNAFQTLQKVEMGATVA-----VLLLL-----  
 SEQ ID NO: 32 MLDRFEQHTLKCSSCKAAYEGFQTWQKVILIGATVVFCATSGIIPSDFOQLRVILLAGLVSA  
 SEQ ID NO: 36 MLDRYEQHTLKCSSCRGAHKAFQTLQKVFMGATVVFGATSGIIPADVQLRILLGAGALVSA  
 SEQ ID NO: 38 MLDRYEQQLSLKCSSCKGAYNAFQNLOQKVEMGATVVCAAAAGIPPDVQLRLIGAAALVSA  
 481 540

SEQ ID NO: 30 -----  
 SEQ ID NO: 32 AIAFALNQLQKNFEFVDYVHAEID  
 SEQ ID NO: 36 ALAYVEYDRQKHEVFVDYVHADID  
 SEQ ID NO: 38 AIAYAFHELQKNFVFVDYVHADID  
 541 564